

REMARKS

This communication is in response to the first Office Action dated August 10, 2005. In that Office Action, the Examiner requested that the specification be amended to include appropriate cross-references to the serial numbers of the related cases. Applicants have amended to the specification to do so. In addition, the Examiner also rejected all of the claims as being unpatentable primarily over U.S. Patent No. 5,590,119 to Moran.

Applicants would like to thank the Examiner for her thorough review of the application and the claims. Applicants have substantially amended the claims to patentably distinguish over the Moran patent. In particular, all of the independent claims have been amended to include the combination of using virtual addresses, multiple equivalent ports, and prioritizing the ports. The Examiner acknowledges that these limitations are not shown in the Moran patent, but instead relies upon 35 U.S.C. §103 arguing that these are obvious modifications of Moran. Applicants respectfully disagree.

First, the use of virtual addresses is not obvious to one of ordinary skill in the art in view of Moran. Moran is a telecommunications system that provides a method for choosing an alternate path for data routing when a primary link is disabled. Importantly, as the Examiner acknowledges, each of the nodes in the network of Moran must have a fixed address. If a dynamic virtual address is used, the self-healing procedure of Moran would be inoperable. Thus, as seen in greater detail below, if Moran were to be combined with a dynamic virtual address system as is claimed, the network of Moran would be inoperable.

Specifically, according to Moran, when a link goes down, a chosen network node floods the network with a signal to determine the **distances** between all nodes within the network. See Col. 2, 47-67. The alternate link with the shortest distance is then chosen for future network traffic. However, in order for the flooding signal to propagate, the actual fixed address of all nodes must be known to the flooding node; otherwise, it is not possible

to flood all of the nodes in the network. Thus, if a dynamic virtual address system were implemented in Moran where each node has a changing address over time, this would lead an inoperable network. Therefore, there is no incentive at all to include a virtual address system in Moran.

Moreover, the system of Moran is a private closed telecommunications network operated by a single party. Because of this, there is little need for security since it is near impossible for a third party to join the network and introduce himself as a node in the network. In contrast, the present invention is very much concerned with security and issues of node impersonation. Specification, paragraphs 38-41. Because of this, a secure network manager (specification, paragraph 28) is used to dynamically assign a virtual address to both a sending and receiving node for each frame of data passed. Even if a third party were able to impersonate a node for purposes of one frame of data, that impersonation would be short-lived since the virtual addresses would have changed quickly for further data.

The issue of security is not as important for a closed network, such as a telecommunications network. However, for other networks, such as the Internet, the use of virtual addresses is an important feature that would be discarded out of hand by Moran. Thus, for the reasons above, it would not have been obvious to use virtual addresses in the network of Moran.

With respect to the issue of equivalent port priority, Moran only teaches that the shortest path be chosen. There is no teaching in Moran that each equivalent port has a priority assigned to it. Again, because of the telecommunications aspect of Moran, the overriding issue in Moran is the quick routing of data through the shortest distance. There is no teaching in Moran to assign priorities to equivalent ports.

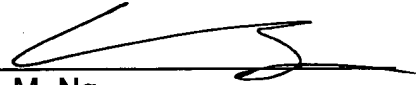
Application No. 10/039,404
Amendment dated
Reply to Office Action of August 10, 2005

Docket No.: 030048027US

In view of the above amendment, applicants believe the pending application is in condition for allowance. Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0665, under Order No. 030048027US from which the undersigned is authorized to draw.

Dated: 8/25/06

Respectfully submitted,

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